CHRONOLOGICAL INDEX–1994

Naval Engineers JOURNAL

VOL. 106

✦ Jan. VOL. 106 NO. 1

	Page
Combat System Maintenance Central (CSMC) by William H. Sackett & Marshall L. Dorman, Jr.	47
Seawolf Submarine Ship Control System: A Case Study of a Fault-Tolerant Design by Michael G. Daughan	54
Establishing the Fundamentals of a Surface Ship Survivability Design Discipline by Robert E. Ball & Charles N. Calvano	71
The Efficient Use of Simulation in Planing Hull Motion Analysis by Dr. Armin W. Troesch & Ltjg. John D. Hicks, USCG	75
A Data-Based Approach to In-Service Engineering Problem Solving by J. Jeffrey Craighead, P.E.	86
The Evolution of U.S. Naval Satellite Systems Antenna Control Technology by Lt. Dave Riling, USN	94
Well Deck Deployable Naval Combatants by Cdr. Michael Bosworth, USN, Scott Black & John R. Meyer	108
Hybrid Hydrofoil Technology Applications by John R. Meyer	123
Mining Gold in the Midwest by Dr. Alfred Skolnick	137
A Practical View of Cost/Schedule Control by Louis D. Chirillo	141

✦ Mar. VOL. 106 NO. 2

	Page
Contrarotating Electric Drive for Attack Submarines by Jeffrey L. Dutton	45
ComSubLant Pump and Valve Repair System by Joseph B. Mueller	51
Identification and Resolution of Propulsion Plant Machinery Problems by Russell W. Brown	61
A Fully-Integrated, Fault-Tolerant (FIFT) Command, Control, Communication, and Instrumentation (C3I) System for a Nuclear Attack Submarine by Michael G. Daughan	69
Advanced Electric Propulsion, Power Generation, and Power Distribution by Thomas B. Dade	83
Leap Technology Upgrades to Tactical Missiles Provide Near-Term Options for Theater Missile Defense by Scott D. Robinson & Richard S. Matlock	93
Modal Test of *John Paul Jones* (DDG-53) Mast and Mast-Mounted Antennas by Mark McLean, Jerry Hill, Dr. Richard Cobb & Fred Randall	110
Performance Assessment of the DDG-51 Collective Protection System by Harrison K. Horning, P.E.	118
Methods for Ship Military Effectiveness Analysis by Dean A. Rains, Ph.D.	126

✦ May VOL. 106 NO. 3

	Page
Medium Speed Diesel Propulsion by John M. Finney	29
A Steam-Augmented Gas Turbine with Reheat Combuster for Surface Ships by Herman B. Urbach, Richard W. Graman, Donald T. Knauss, Jerry W. Watts, Terrence E. Dwan, Eugene E. Mitchell, & Ensign Cory Howes	41
Main Propulsion Power Take-Off Gear Configuration for a ETC Gun Pulsed Power Generator by Kenneth E. Pettersen, Charles L. Bielitz & John Cianci	52
Fuel Cell Power Plant for Surface Fleet Applications by Philippe Goubault, Marc Greenberg, Todd Heidenreich & Joe Woerner	59
Integrated Power System for Marine Applications by LCdr. Norbert H. Doerry & LCdr. James C. Davis	77
Use of Virtual Environments in the Design of Ships by Otto P. Jons, J. Christopher Ryan & Gary Jones	91
The PCF: A Patrol Craft Standard by Salvadore J. Guarino	107
An Assessment of Current Warship Damaged Stability Criteria by LCdr. Stephen W. Surko	120
***Juniper*—The New U.S. Coast Guard Buoy Tender** by Timothy J. Danhieux, James A. LaCosse, Bernard F. Bentgen & Cdr. Robert E. Williams, USCG (Ret.)	132
FF-21: A Fast Frigate for the 21st Century by Leonid Afanasieff & John P. Mabry	150
Design and Hydrodynamic Aspects of the Amphibious Transport Vessel for the Royal Netherlands Navy by Hans Hopman, Geert K. Kapsenberg & Egbert M. Krikke	163
A Truly Allied Undertaking: The Progeny of Britain's *Empire Liberty*, 1931-1943 by Gary E. Weir	175
Naval Special Warfare Future Concepts—The Case for Operational Mobility by Capt. Vic Meyer, USNR (Ret.)	184
Airborne Passive/Active Electro-Optic Sensor System for Theater Ballistic Missile Defense by Steven A. Davidson, Joel Grimm, Philip Blumenau, Kenneth Schultz, Alan Kachelmyer, Leo Sullivan, William Keicher, Michael Hess, Adam Prince & LCdr. Mary Martin, USN	192

Page

Ship Self-Defense Performance Assessment Methodology
by James Polk, Thomas McCants & Robert Grabarek 208

Integration of Electric Gun Systems Aboard Naval Surface Combatants
by Guy F. Grater & Steven Fagan 220

Live Fire Test and Evaluation for Ships
by Joel B. Bloom, Ronald N. Reese, Ph.D. & Thomas M. Hopkins 228

The Propelled Variable Depth Sonar
by Laurent Letot & Bernard Vignand 246

Joint Logistics Over the Shore Operations
by Theodore G. Vaughters 256

Ship Repair Standard Cost Model
by Bertram D. Smith, Jr. 264

The Maintenance Requirements System: Risk-Based Resource Programming at Work
by Kenneth S. Jacobs & Grant W. Soderstrom 279

Making Piping Systems Fire-Safe
by Vinod Bhasin, Lloyd Nilsen, Karan Gupta & Dennis Conroy 285

***Sea Shadow* Stealth Ship**
by Paul Chatterton & Richard Paquette 296

✦ July VOL. 106 NO. 4

State of the Society
by RAdm. George P. Nanos, Jr., USN, President, ASNE 31

ASNE Day Plenary Session "The Challenge Continues"
RAdm. George P. Nanos, Jr., USN, President, ASNE 35

ASNE Day Plenary Session "The Response"
Dr. Mike Vlahos, RAdm. John Mitchell, RAdm. Paul Robinson, USN, RAdm. Edward S. "Skip" McGinley, USN, RAdm. Wayne Meyer, USN (Ret.) 38

ASNE Day Luncheon Address
by Dr. Benjamin H. Alexander, Drew Dawn Enterprises, Inc. 55

ASNE Banquet Address
by Congressman Gene Taylor (D. Miss.) 58

DDG-51 Class Computer-Aided Design
by Joanne F. Ouillette 165

Pitch Stabilization for Surface Combatants
by Larrie D. Ferreiro, Timothy C. Smith, William L. Thomas III & Roberto Macedo 174

Materials Aspects of Damage Tolerance and Reliability of Ship Structures and Components
by M.Z. Shah Khan, D.S. Saunders, I.A. Burch & A.P. Mouritz 192

Naval Modeling and Simulation: Charting a Path to the User
by J. Bruce Ricketts 209

Repairs to Fire Damage, September 1942, USS *Wakefield* (AP-21)
by RAdm. E.H. Batcheller, USN (Ret.) 212

Page

✦ September VOL. 106 NO. 5

Studies of Helicopter Capable DDG-51 Variants
by Robert J. Scott and Kevin E. Moak 33

Achievements with Advanced Craft
by Donald L. Blount 49

Environmental Compliance in the Navy
by Richard A. Guida 60

CITIS Holds Promise for both DoD and Commercial Contractors
by Leonard S. Adler 68

Navy Night Vision/Electro-Optics on the Threshold
by Ted B. Markey 73

The Development of the U.S. Coast Guard's 47' Motor Lifeboat
by David M. Shepard 79

Comparison of Powering Performance Between DDG-51 and the Conventional Combatant Hull Forms
by Shou-Jen Tsai, Bret R. Hopkins and Richard J. Stenson 88

Advanced Waterjet Systems
by John G. Stricker, Alan J. Becnel and John G. Purnell 100

Does the IRS Want You Dead?
by Jerome J. Fee 29

Historical Perspective: The Battle of Surigao Straits
by Adm. James L. Holloway III, USN (Ret.) 110

✦ November VOL. 106 NO. 6

Address Before Tidewater Mini-Symposium on Naval Aviation
by VAdm. Arthur K. Cebrowski, USN, Director, Space and Electronic Warfare, OPNAV 17

Computer-Aided Engineering Technology for the Design of Electronic Systems
by Vincent J. Argiro, Christopher Nicklaw & Michael Walsh 21

Advanced Avionics Architecture: The NAVAIR Study
by Rodney S. Katz, Cdr. Larry Jahnke, USN & Cdr. Charles. E. Jewett, USN 31

Acquisition Reform and Best Product Procurement: An Engineering View
by David A. Fisher & Alfred Skolnick, Ph.D. 41

Electronic Data Interchange and Naval Aviation
by Robert P. Dolan 59

Application of Open Systems Standards to DoD Avionics
by Chuck Roark, Ph.D. and Bill Kiczuk 65

Nondestructive Evaluation of Navy Structural Components Using Barkhousen Noise Analysis: The Future Needs of Naval Aviation
by J. Jo, G. Caudill & R. Santos 71

Corrosion of Aircraft Landing Gear Steels
by Eun U. Lee & Jeffrey Waldman 77

Evaluation of the F/A-18E/F Aircraft Flowfield Effect on the HARM Missile
by Alexis Cenko & Seth Moyer 85

AUTHOR INDEX

Naval Engineers JOURNAL

VOL. 106

	Month	Page
✦ A		
Leonard S. Adler CITIS Holds Promise for both DoD and Commercial Contractors	SEP	68
Leonid Afanasieff & John P. Mabry FF-21: A Fast Frigate for the 21st Century	MAY	150
Dr. Benjamin H. Alexander, Drew Dawn Enterprises, Inc. ASNE Day Luncheon Address	JUL	55
Vincent J. Argiro, Christopher Nicklaw & Michael Walsh Computer-Aided Engineering Technology for the Design of Electronic Systems	NOV	21
✦ B		
RAdm. E.H. Batcheller, USN (Ret.) Repairs to Fire Damage, September 1942, USS *Wakefield* (AP-21)	JUL	212
Vinod Bhasin, Lloyd Nilsen, Karan Gupta & Dennis Conroy Making Piping Systems Fire-Safe	MAY	285
Robert E. Ball & Charles N. Calvano Establishing the Fundamentals of a Surface Ship Survivability Design Discipline	JAN	71
Joel B. Bloom, Donald M. Reese, Ph.D. & Thomas M. Hopkins Live Fire Test and Evaluation for Ships	MAY	228
Donald L. Blount Achievements with Advanced Craft	SEP	49
Cdr. Michael Bosworth, USN, Scott Black & John R. Meyer Well Deck Deployable Naval Combatants	JAN	108
Russell W. Brown Identification and Resolution of Propulsion Plant Machinery Problems	MAR	61
✦ C		
VAdm. Arthur K. Cebrowski, USN, Director, Space and Electronic Warfare, OPNAV Address Before Tidewater Mini-Symposium on Naval Aviation	NOV	17
Alexis Cenko & Seth Moyer Evaluation of the F/A-18E/F Aircraft Flowfield Effect on the HARM Missile	NOV	85
Paul Chatterton & Richard Paquette *Sea Shadow* Stealth Ship	MAY	296
Louis D. Chirillo A Practical View of Cost/Schedule Control	JAN	141
J. Jeffrey Craighead, P.E. A Data-Based Approach to In-Service Engineering Problem Solving	JAN	86
✦ D		
Thomas B. Dade Advanced Electric Propulsion, Power Generation, and Power Distribution	MAR	83
Timothy J. Danhieux, James A. LaCosse, Bernard F. Bentgen & Cdr. Robert E. Williams, USCG (Ret.) *Juniper*—The New U.S. Coast Guard Buoy Tender	MAY	132
Michael G. Daughan A Fully-Integrated, Fault-Tolerant (FIFT) Command, Control, Communication, and Instrumentation (C3I) System for a Nuclear Attack Submarine	MAR	69
Michael G. Daughan Seawolf Submarine Ship Control System: A Case Study of a Fault-Tolerant Design	JAN	54
Steven A. Davidson, Joel Grimm, Philip Blumenau, Kenneth Schultz, Alan Kachelmyer, Leo Sullivan, William Keicher, Michael Hess, Adam Prince & LCdr. Mary Martin, USN Airborne Passive/Active Electro-Optic Sensor System for Theater Ballistic Missile Defense	MAY	192
LCdr. Norbert H. Doerry & LCdr. James C. Davis Integrated Power System for Marine Applications	MAY	77
Robert P. Dolan Electronic Data Interchange and Naval Aviation	NOV	59
Jeffrey L. Dutton Contrarotating Electric Drive for Attack Submarines	MAR	45
✦ F		
Jerome J. Fee Does the IRS Want You Dead?	SEP	29
Larrie D. Ferreiro, Timothy C. Smith, William L. Thomas III & Roberto Macedo Pitch Stabilization for Surface Combatants	JUL	174
John M. Finney Medium Speed Diesel Propulsion	MAY	29
David A. Fisher & Alfred Skolnick, Ph.D. Acquisition Reform and Best Product Procurement: An Engineering View	NOV	41
✦ G		
Guy F. Grater & Steven Fagan Integration of Electric Gun Systems Aboard Naval Surface Combatants	MAY	220
Philippe Goubault, Marc Greenberg, Todd Heidenreich & Joe Woerner Fuel Cell Power Plant for Surface Fleet Applications	MAY	59
Salvadore J. Guarino The PCF: A Patrol Craft Standard	MAY	107
Richard A. Guida Environmental Compliance in the Navy	SEP	60

	Month	Page
✦ H		
Adm. James L. Holloway III, USN (Ret.) Historical Perspective: The Battle of Surigao Straits	SEP	110
Hans Hopman, Geert K. Kapsenberg & Egbert M. Krikke Design and Hydrodynamic Aspects of the Amphibious Transport Vessel for the Royal Netherlands Navy	MAY	163
Harrison K. Horning, P.E. Performance Assessment of the DDG-51 Collective Protection System	MAR	118
✦ J		
Kenneth S. Jacobs & Grant W. Soderstrom The Maintenance Requirements System: Risk-Based Resource Programming at Work	MAY	279
J. Jo, G. Caudill & R. Santos Nondestructive Evaluation of Navy Structural Components Using Barkhousen Noise Analysis: The Future Needs of Naval Aviation	NOV	71
Otto P. Jons, J. Chrlstopher Ryan & Gary Jones Use of Virtual Environments in the Design of Ships	MAY	91
✦ K		
Rodney S. Katz, Cdr. Larry Jahnke, USN & Cdr. Charles. E. Jewett, USN Advanced Avionics Architecture: The NAVAIR Study	NOV	31
✦ L		
Eun U. Lee & Jeffrey Waldman Corrosion of Aircraft Landing Gear Steels	NOV	77
Laurent Letot & Bernard Vignand The Propelled Variable Depth Sonar	MAY	246
✦ M		
Ted B. Markey Navy Night Vision/Electro-Optics on the Threshold	SEP	73
RAdm. Edward S. McGinley, USN ASNE Day Plenary Session, "The Response"	JUL	49
Mark McLean, Jerry Hill, Dr. Richard Cobb & Fred Randall Modal Test of *John Paul Jones* (DDG-53) Mast and Mast-Mounted Antennas	MAR	110
John R. Meyer Hybrid Hydrofoil Technology Applications	JAN	123
Capt. Vic Meyer, USNR (Ret.) Naval Special Warfare Future Concepts—The Case for Operational Mobility	MAY	184
RAdm. Wayne Meyer, USN (Ret.) ASNE Day Plenary Session Wrap-Up	JUL	52
RAdm. John Mitchell ASNE Day Plenary Session, "The Response"	JUL	42
Joseph B. Mueller ComSubLant Pump and Valve Repair System	MAR	51
✦ N		
RAdm. George P. Nanos, Jr., USN, President, ASNE State of the Society	JUL	31
RAdm. George P. Nanos, Jr., USN, President, ASNE ASNE Day Plenary Session, "The Challenge Continues"	JUL	35
✦ O		
Joanne F. Ouillette DDG-51 Class Computer-Aided Design	JUL	165
✦ P		
Kenneth E. Pettersen, Charles L. Bielitz & John Cianci Main Propulsion Power Take-Off Gear Configuration for a ETC Gun Pulsed Power Generator	MAY	52
James Polk, Thomas McCants & Robert Grabarek Ship Self-Defense Performance Assessment Methodology	MAY	208
✦ R		
Dean A. Rains, Ph.D. Methods for Ship Military Effectiveness Analysis	MAR	126
J. Bruce Ricketts Naval Modeling and Simulation: Charting a Path to the User	JUL	209
Lt. Dave Riling, USN The Evolution of U.S. Naval Satellite Systems Antenna Control Technology	JAN	94
Chuck Roark, Ph.D. and Bill Kiczuk Application of Open Systems Standards to DoD Avionics	NOV	65
RAdm. Paul Robinson, USN ASNE Day Plenary Session, "The Response"	JUL	46
Scott D. Robinson & Richard S. Matlock Leap Technology Upgrades to Tactical Missiles Provide Near-Term Options for Theater Missile Defense	MAR	93
✦ S		
William H. Sackett & Marshall L. Dorman, Jr. Combat System Maintenance Central (CSMC)	JAN	47
Robert J. Scott and Kevin E. Moak Studies of Helicopter Capable DDG-51 Variants	SEP	33
M.Z. Shah Khan, D.S. Saunders, I.A. Burch & A.P. Mouritz Materials Aspects of Damage Tolerance and Reliability of Ship Structures and Components	JUL	192
David M. Shepard The Development of the U.S. Coast Guard's 47' Motor Lifeboat	SEP	79
Dr. Alfred Skolnick Mining Gold in the Midwest	JAN	137
Bertram D. Smith, Jr. Ship Repair Standard Cost Model	MAY	264
John G. Stricker, Alan J. Becnel & John G. Purnell Advanced Waterjet Systems	SEP	100
LCdr. Stephen W. Surko An Assessment of Current Warship Damaged Stability Criteria	MAY	120

	Month	Page
✦ T		
Congressman Gene Taylor (D. Miss.) ASNE Banquet Address	JUL	58
Dr. Armin W. Troesch & Ltjg. John D. Hicks, USCG The Efficient Use of Simulation in Planing Hull Motion Analysis	JAN	75
Shou-Jen Tsai, Bret R. Hopkins & Richard J. Stenson Comparison of Powering Performance Between DDG-51 and the Conventional Combatant Hull Forms	SEP	88
✦ U		
Herman B. Urbach, Richard W. Graman, Donald T. Knauss, Jerry W. Watts, Terrence E. Dwan, Eugene E. Mitchell, & Ensign Cory Howes A Steam-Augmented Gas Turbine with Reheat Combuster for Surface Ships	MAY	41
✦ V		
Theodore G. Vaughters Joint Logistics Over the Shore Operations	MAY	256
Dr. Mike Vlahos ASNE Day Plenary Session, "The Response"	JUL	35
✦ W		
Gary E. Weir A Truly Allied Undertaking: The Progeny of Britain's *Empire Liberty*, 1931-1943	MAY	175

CPV Mark VIII O-SEAL tube fittings eliminate leakage ...won't vibrate loose. A captive O-ring seals from vacuum to over 3000 psi. Flat-faced design lets you slip components in or out without springing or cutting the line. Fittings can be easily brazed or welded in place. Sizes from 1/8" to 2". For details, request Catalog 74. CPV Mfg., Inc., 851 Preston St., Philadelphia, PA 19104. (215) 386-6508.

ADVERTISERS INDEX

CPV Manufacturing, Inc.	99
Caterpillar Inc.	C-3
Envisions	15
Gibbs & Cox, Inc.	99
Newport News Shipbuilding	C-2
Seabury-Smith	6
VSE Corporation	4

GIBBS & COX INC.

Naval Architects & Marine Engineers

50 West 23rd Street
New York, N.Y. 10010
212-366-3900

1235 Jefferson Davis Highway
Arlington, Va. 22202
703-979-1240

P.O. Box 1306, 1166 Church Road
Brunswick, Me. 04011
207-721-8200